



THE RARA RAG

Newsletter of The Rochester Amateur Radio Association, Inc.

Founded in 1931

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INTRODUCTION TO ARDUINO HARDWARE

SCOTT THEIS, W2LW, RARA VICE PRESIDENT

As a tie-in with our February RARA Academy, this month we will cover Arduino hardware. Forest Shick (WA2MZG) will get us started with Arduino hardware.

February's meeting presentation will start with a very short discussion of various hobby-style, microcontroller modules. Then Forest will focus on the Arduino Nano.

We will examine the different hardware interfaces available on the Nano: Digital I/O, A/D Conversion, Interrupts and more. Forest will also provide a short discussion on prototyping – how to do it easily.

If you're interested in programming for the Arduino, this presentation will get you set up for the February 22nd Academy on "Very Basic Arduino Programming". Signup will be available at the meeting.

Forest has been interested in electronics since he was 12 years old. He has been a ham and a life member of ARRL for over 40 years and a past President of RARA. His professional career started at Motorola Communications Division where he worked with UHF & VHF land mobile and rail transit radios. He also worked at Harris RF Communications in the VHF / UHF land mobile radio group and later at a small company designing battery operated, micro-processor-controlled instruments.

If you plan on attending the "Very Basic Arduino Programming" academy, it is a good idea that you attend the February RARA meeting and get a head start!

Please join us on Wednesday, February 5th, 2020, 7:00PM at the Boy Scouts Headquarters at 2320 Brighton Henrietta Townline Road, Rochester, New York 14623.



K2JD

N2EH

W2EOC



Winterfest 2020

**Saturday February 15, 2020, 11:30AM
Stewart Lodge, Mendon Ponds Park**



BOARDZ BUZZ

TIM BARRETT, K9VB

This last few months have been interesting one for me. First, I retired last May after close to forty years of continuous employment with the same organization, and rather than having some free time I decided to downsize to a smaller house which turned out to be a major exercise! As a result, I have been off the air since April and only now getting to unpack my radio gear. As soon as the snow disappears, I will complete drilling the hole into my basement to allow me to connect up antennas. This is exciting for me; I have always used my space limited Butternut HF vertical which did very well but now I have a couple of acres of woodland with large trees and some space to put up a range of antennas. Hoping to get up an off-center fed dipole by the time you read this. I'd like to do some antenna experimentation trying different methods, if any of you are interested in antenna experimentation or have suggestions let me know!

Club Activities

As I write this, I am thinking of the January RARA meeting I just attended. Despite the cold and a last moment change of venue, we had a great turnout for a very interesting presentation about Parks on the Air (POTA) from Karl Heinz Kremer. I'd kind of dismissed POTA for myself as I don't currently have any portable equipment, but I learned that there are two aspects to it, and I can be a hunter from the comfort of my own shack and still chase awards. I will certainly give that a try!

I've been a member of RARA since 2006 and, in spite of all the talk I hear about amateur radio dying I continue to be impressed by the range of things that we do in the club and the new initiatives that benefit the membership. To mention just two that have really flourished in the past 12 months, RXCWG, the group set up with the XRX Radio club to promote Morse code has been a great success with several alumni getting on the air using CW. Another initiative is the restarting of Saturday morning RARA Academy sessions. Have you been to any of these? They are always well attended, and I've found them to be a great environment to develop that motivation needed to learn a new skill. If you haven't been to one, I highly recommend them whether you are a newbie or an expert on the topic.

Membership

As Membership Secretary I can report that membership is looking healthy, currently standing at nearly 470. That is more than the same time last year and there are some lapsed members still to renew for the 2020 season. If you are one of them, please take a few minutes to visit [our renewal page](#) - you can use a credit card (you don't need to be a PayPal member) or print a document to send with your check.

I am also responsible for ensuring that points awarded for voluntary RARA activities get assigned. This has been a challenge recently and not everything is up to date. My apologies for that, as I mentioned earlier my time has been limited and

we also have some issues with our software. (I know, a poor workman...!) We are working on the software and separately I am putting in extra time to make sure that points are correct. By the time you read this I hope to have everything in order, please let me know if you think your point allocation does not look correct and I will investigate.

RARA Website

Have you visited the [RARA Website](#) recently? Thanks to our webmaster, Scott Theis, W2LW for the great job he does updating it. There are always items on the home page of local or general interest. In case you have missed these, see [past 'Headlines' and 'Of interest' items](#). I guarantee if you look there you will find several things of interest and while away some time reading about them!

Winterfest

There is a posting further down about the Winterfest. We will have several radios there and special consideration will be made to get new operators on HF - no experience necessary. If you are free on Feb 15th please come along, it is always a fun event, and the Stewart Lodge is heated!

See you at the Winterfest!!

CALENDAR OF EVENTS

WEDNESDAY FEBRUARY 5, 2020 - RARA General Meeting

7:00 PM at BSA Headquarters
2320 Brighton Henrietta Town Line Rd

THURSDAY FEBRUARY 6, 2020 - RARA Board of Directors Meeting

6:30 PM at Novaworks, 333 Metro Park, F-500

SATURDAY FEBRUARY 15, 2020 WINTERFEST 2020

JUNE 6, 2020 RARA HAMFEST 2020

July 11, 2020 RARA PICNIC 2020



EDUCATION

TIM BROWN, WB2PAY, EDUCATION COORDINATOR

GOTA (GET ON THE AIR)

RARA 's 2020 Field operating events

Each event will feature a **Theme Topic**

February 15th RARA Winterfest at Mendon Ponds Park

-- **Using rigs with DSP Filters**

-- **Set up of Antennas and Rigs begins at 10am. Come help set up a few antennas and get on the air.**

RARA ACADEMY WORKSHOPS FOR 2020

2020 Topics: (Some Locations TBD)

February 5th -- The RARA meeting will cover ARDUINO HARDWARE.

February 22nd --1030am to 1:30pm BASIC ARDUINO PROGRAMMING

Location: Irondequoit Library Room 114

10:30AM to 1:30PM

- Presenter will be Forest Shick, WA2MZG

Course Information and Links

March 14th -- FLDIGI Digital software - Both live and simulated contacts will be made.

- Presenter will be Paul Conaway, KD2DO

April 11th -- DSTAR, DMR & FUSION MODES - Learn the basics of these modes.

-Presenters will be Mike Moore, KC1NM and Steve Verzulli, KA1CNF

May 9th -- PARKS ON THE AIR-- LOCATION TBD

-Presenter will be Karl Heinz Kremer, K5KHK

Latest Academy information is available at

https://www.rochesterham.org/rara_academy.htm

RARA LICENSE COURSES

2020 Winter/Spring License Classes

Learn new skills, upgrade your license, make new friends, and have some fun; sign up for the Winter/Spring sessions of RARA's license classes.

Amateur Technician and General classes will commence at 7pm on Tuesday February 11, 2020 at RIT in GLEASON Hall #9.

The Extra Class will begin on Monday February 10, 2020 at RIT in Gannett Hall #7b.

Classes run from 7- 9:30pm for 10 weeks with FREE testing on the 11th week. Licensing courses are FREE to current members and students. The cost for non-members is \$15.00.

Not a current RARA member? Register at:

<https://www.rochesterham.org/membership.htm>

TECHNICIAN CLASS will be held in Gleason Hall Room 9-2149.

Instructor will be Larry Hill, N2AXJ.

GENERAL CLASS will be held in Gleason Hall Room 9-3149.

Instructor will be Freddie Sulyma, WB2GFZ.

EXTRA CLASS will be in Gannett Hall 7b, Room TBD.

Instructor will be John Viggiano, NV2X.

ARRL Licensing manuals may be purchased for the discounted rate of \$25.00 at the February RARA meetings and the first night of class. Please make checks payable to RARA, or have exact amount.

In order to have sufficient License Manuals and keep you updated on any schedule changes, please pre-register **<mailto:education@rochesterham.org>**

THE ELMERS CORNER

Our next Elmers Corner will be at the Feb 5th Meeting from 6:15pm to 6:45pm prior to the start of the regular meeting.

Forest Shick, WA2MZG, will host the February session.

Dave Timmons, W2DST, will host the March session

Dave will help program your radio with CHIRP. Bring your radio and your programming cable if you have one.

Please take advantage of these RARA sponsored training, education and operating opportunities.

ELECTRONICS BRAIN TEASER

DC POWER No1

How many milliwatts are being dissipated when a current of 7.0 milliamperes flow through 1.25 kilohms?

Find the answer and more Ham Radio Math at:

<http://www.ka3pmw.com/general%20lesson%2004.pdf>

Silent Key

**Bradley E. Allen
KB2CHY**

January 11, 2020

PUBLIC SERVICE REPORT

MIKE MOORE, KC2NM, PUBLIC SERVICE COORDINATOR

RARA participated in the Rochester Museum & Science Center Holiday Science & Technology Days on Friday, Dec. 27 through Sunday, Dec. 29. Note: We were asked not to photograph museum visitors. Pictures were taken before the museum opened. Our crowds were pretty good! We presented three display tables. The first display was a demonstration of Morse Code where our visitors could type on a computer and listen to the generated Morse characters. Using a straight key or paddle, they were invited to send code and observe the decoded characters on the screen. Pictures on the storyboard depict youth involvement in Amateur Radio.



Our next display explained the relationship between magnetic and electric fields. We showed electric generators, motors, eddy currents, and discussed radio propagation.



February Raffle Prizes

- Shortwave Receivers Past and Present
- MFJ-1811 Lightning Surge Protector
 - 11dB Switched Attenuator

Coming in March

- ARRL Antenna Book Box Set



Amateur Radio Station operation was demonstrated using DSTAR and DMR on the W2RIT 442.075 repeater. For HF, our RARA Yaesu 450D transceiver made several 20M contacts all over North America. The RAC Canada Winter Contest 2019 provided many of our contacts.



The RARA booth was located on the second floor of the museum. Our HF feed-line was run to the rear of the building and ran down next to the elevator and out of the doors to the cafe. We operated using a G5RV Jr placed outside of the cafe.



Participating in the event were Don AC2EV, Brian KA2CGB, Mike KC2NM, Cedric WA2FTV, and Ed WB2WXM. Thanks to Don Kiser AC2EV who served as captain of the event.

For up to date information about all of our Public Service events take a look at our RARA website https://www.rochesterham.org/public_service.

Please mark your calendars for our upcoming RARA Public Service Events

Tour de Cure	Xerox Campus Webster	Saturday	June 13, 2020
Bike MS: ROC the Ride	Genesee Valley Park - Rochester, NY	Saturday	Sept. 12, 2020
Fairport Lift Bridge Regatta	Erie Canal – Fairport, NY	Saturday	Sept. 19, 2020
JOTA (Verify CTC Date)	Camp Babcock Hovey	Saturday	Oct. 17, 2020
Pumpkin Patrol	Overpasses of the New York State Thruway	Friday & Saturday	Oct. 30-31, 2020
Holiday Science & Technology Days	Rochester Museum & Science Center	Monday - Wednesday	Dec. 28-30, 2020

VOLUNTEERING

ED WILKONSKI, K1EM

RARA is an all-volunteer organization that exists to promote amateur radio and the activities of its members. Consider part 97.1, basis and purpose, the rules and regulations in this part are designed to provide an amateur radio service having a fundamental purpose as expressed in the following principles:

- A. Recognition and enhancement of the value of the amateur service to the public as a voluntary noncommercial communication service, particularly with respect to providing emergency communications.
- B. Continuation and extension of the amateur's proven ability to contribute to the advancement of the radio art.
- C. Encouragement and improvement of the amateur service through rules which provide for advancing skills in both the communication and technical phases of the art.
- D. Expansion of the existing reservoir within the amateur radio service of trained operators, technicians, and electronics experts.
- E. Continuation and extension of the amateur's unique ability to enhance international goodwill.

Volunteering is generally considered an altruistic activity where an individual or group provides services for no financial or social gain "to benefit another person, group or organization".

Volunteering is also renowned for skill development and is often intended to promote goodness or to improve human quality of life. Volunteering may have positive benefits for the volunteer as well as for the person or community served.

Skills-based volunteering, practiced in organizations like RARA, leverage the specialized skills and the talents of individuals to strengthen the infrastructure of nonprofits, helping them build and sustain their capacity to successfully achieve their missions.

This is in contrast to traditional volunteering, where specific training is not required.

RARA provides License Courses and Exams, Elmering, Public Service, Operating, and Social Events all to further the principles of part 97.1 as stated above. As each of us looks forward to 2020, let us strive to add an instance of volunteering to help RARA extend its reach.

RARA WINTERFEST

Saturday February 15th, 2020

Come Join the Fun!



Our tenth annual RARA Winterfest is right around the corner! As always, we will have our very popular crockpot cook-off and everyone is invited to bring their favorite creation to share. You are encouraged to bring anything you can make in a crockpot. We anticipate seeing, and eating all sorts of soups, chili, casseroles, lasagna, pizza, stew and who knows what else. As before, we will be awarding prizes

of RARA membership points to the top entrants.

We are also inviting everyone to bring a dessert to share and of course, we will be judging dessert creations and awarding more RARA membership points for the best one. We encourage you to put on your chefs' hats and wow us with your culinary creativity.



As always, we encourage you to bring radios and antennas so we can operate and have fun. Last year, despite the cold, we got three antennas up and were operating 4 different radios. For those of us that don't have good locations for HF antennas, operating in the park with low QRM was a pleasure. During the past several Winterfests we have had visitors who were interested in becoming hams. Active operating positions are a great way to introduce them to the hobby and encourage them to become hams themselves. Of course, if you know anyone who would like to learn more about our wonderful hobby please invite them to join us. We will be there around 10:00am to set up radios and antennas and anyone willing to help is welcome to join us.



We are looking for one or two volunteers to help us set up food and tables so if you can do that please email Tim.K9VB@gmail.com to let us know.

We encourage everyone else to plan to get there around 11:30 AM when the eating and operating will begin. RARA will provide non-alcoholic beverages along with all the necessary paper products that will be needed to enjoy the great food we will certainly have. I'll look forward to seeing everyone there. The 'fest will be held on Saturday February 9th at the Stewart Lodge in Mendon Ponds Park. The lodge has heat, a fireplace, it is located near the bathrooms and there is plenty of parking. [Click for map.](#)

Hoping to see you on the 15th and you may be one of the lucky ones to win one of our door prizes!

RAGS OF THE PAST

ED GABLE, K2MP, RARA HISTORIAN

20 Years Ago, February 2000

RARA VP and program chairman Keith Freeberg N2BEL (sk), introduced the February meeting by welcoming Ron Jakubowski K2RJ, from Antenna Specialist Corporation, speaking on the newest advances in antenna theory and practice. Some may remember Ron as a local Amateur working at Harris/RF and a past RARA President and for many years the RARA Rag Editor. Ron continues his support of such organizations with his current position as Treasurer of the Radio Club of America. This New Year saw a continuation, to the benefit of all RARA members, of the excellent, thoughtful and balanced reporting by Lloyd R. Caves, WB2EFU (N2PU) on various subjects of happenings within RARA under his "Rag Chew" column. This issue had two such articles with the first detailing the activities scheduled for the three day, June 2000, Rochester Hamfest. Lloyd's second writing explained the controversial Amateur radio restructuring becoming effective on April 15th. Lloyd explained the three tier system; Technician, General and Extra Class, along with the elimination of the 13 and 20 word per minute code requirement. Restructuring had the largest local impact upon Tim Magee WB2KAO, and his crew running the RARA Code and Theory classes, as all of the theory class content changes. Tim expects large class sizes as the restructuring brings new amateurs greater operating privileges at HF and VHF bands as well as phone, CW and data modes. In his "Prez Says" column, RARA President Bob Moore, N2USB, devoted his half page allotment to the same subject of restructuring and how the outcome will eventually be beneficial to the amateur community overall. At this time Judy Stonehill, N2KXS, wrote the Rag's YL column. This month a guest, Lia Zwack WA2NFY (sk), wrote an interesting article telling of how she became an amateur after surviving that awful screeching noise coming from her husband's radio room and how she went through all of the licensing chairs and learned to love CW and her hard earned Extra Class ticket. Bill McDonnell KG2F (sk), continued his column with Part 3 on Amateur Television techniques and their application in the Rochester area. In his DX Happenings column Ed Gable K2MP, wrote to tell of DX news including the plan to activate Clipperton Island, as well as Macquarie Island as VK0MM, and XZ0A on Myanmar to be nice year 2000 catches. From the Want Ads you could buy a Hustler 5BTV vertical for \$25.00 from Ed K2MP. A relatively new commercial advertiser was Kitt Diebold N2NNJ, with Connecticut, offering Internet connecting services. And now for the rest of the story... This columnist was a bit set back when he reached into his archives to pull out the February 2000 issue and found he didn't have one! Panic time? No, as I have two archive sets. Oops, the second set didn't have one either. No sweat, old friend Lloyd Caves, N2PU, always comes through, but not this time. But yes, Irv Goodman AF2K, came through and I got his copy only to find something curious. His February issue was printed "January" but had "FEB" hand printed in ink on the cover. Sure 'nuff, the February 2000 issue was printed with January 2000 on the cover.



the RARA RAG

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Antennas

Former Rochester Resident and Past President Talks On Antennas

Keith Freeberg, N2BEL

The February 4, 2000 RaRa meeting will feature Ron Jakubowski, K2RJ, sharing some leading edge technology affecting antenna design and fabrication today. 'More Power' often equates to 'more efficient antenna'.

Ron had lived in the Rochester area for many years while working at RF Harris. A few years ago he relocated to Cleveland, Ohio to take a position with Antenna Specialist. Through this company buying and selling parts of their business Ron ended up working in the Buffalo area. He is a past President of RaRa and a past Rag Editor.

Spring 2000 License Class Announcement

Tim Magee, WB2KAO

Spring class registration will be held on Monday February 14th, 7 PM at the Monroe County Social Services Building, 111 Westfall Rd., in the auditorium. Classes will run through Monday May 22nd.

This semester we will be aligning our course offerings in accordance with the newly announced license restructuring. Each test element under the new structure will be covered by a particular course. We will offer 5 WPM CW, Technician, General and Extra theory. In addition to these required elements, we will offer a "high speed" CW class for those desiring to continue on above 5 WPM. CW and Extra theory will be taught the first hour starting at 7 PM followed by Technician and General theory the second hour.

The timing of the effective date for license restructuring, April 15, 2000, has some interesting implications. First, it is expected that the question pools will be updated, to allow testing on the modified theory elements after April 15th. Second, it is doubtful that new preparation materials will be published quite that fast. Thirdly, the demand for the current manuals, which are no longer in production, may exceed supply.

Since the new theory elements are not anticipated to be vastly different from those they replace, it is our intention to continue to teach theory elements from the current materials and make every attempt to accommodate mid-stream course corrections, if necessary, when the new question pools become available. Hopefully, we will be able to provide the manuals to everyone.

I am hoping for a record turnout this semester. Under the new license structure 5 WPM CW and General theory gives you lots of HF privileges from 160 to 10 m. We're looking forward to seeing you for an upgrade, or a family member or a friend. Please pass the word. Thanks.

RaRa Amateur Radio License Testing

Novice - Tech - Tech Plus
General - Advanced - Extra

Saturday February 19, 2000

Registration — 8:30AM

Testing — 9:00AM

Social Services Building

111 Westfall Rd., Rochester

Inquires (716) 334-4488

aa2fo@rpa.net

RaRa Meeting

February 4, 2000

8:00 P.M.

Henrietta Fire Hall

3129 East Henrietta Road

Antennas

By Ron Jakubowski

**NEXT RAG DEADLINE
FEBRUARY 11, 2000**

The program for this month was on DXing and featured Bob Roberts, WA2QAU, using a forum style meeting, where Al Keltz W2TXB, Gene Fuller W2LU, Rick Berg WA2RLQ and Corney Unruh WA2EOQ, discussed the latest DX happenings. The venue for the meeting was the Gleason Recreation Center where the Gleason Employees Amateur Radio Society (GEARS) were hosts. The 1980 RARA Dinner-Dance was scheduled for February 9th at the Hospitality House on Penfield Road. Continuing on the DX theme Rick Berg WA2RLQ, wrote a long article on DX operating techniques. Hamtronics, of Moul Road in Hilton, NY, Gerry Vogt WA2GCF (sk), President, announced their new 24 page catalog of VHF/UHF kits and accessories. Written in this article was an announcement of a beginners Road Rally on April 27th with Roger Haarnart WB2BWQ (sk) as Chairman. Code practice for local area hams was announced where 22, 15 and 7 WPM code was sent on the WB2PYI/R repeater by Herb Penner AI2R. On the same repeater a Swap Net was started Roger Dennis WB2HWO and Ralph Brown N2VAD as moderators. Also starting was a WNY CW Traffic Training Net, on 28.160 Mhz, with George Heron, N2APB, as net control. We know of Want Ad and Commercial advertiser announcements but the Rag also printed "Stolen Equipment" notices as necessary. Here we can read that a KDK Two Meter FM rig was stolen from Ted Wright KA2EUU. From the Want Ads you could buy a Ten Tec 544 two hundred watt transceiver from John Schooley N2NC (sk). The Heathkit Electronics Center, on Jefferson Road, remained a long term commercial advertiser.

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February 1st Meeting Features DX Forum At Gleason Recreation Center

by Otto Bluntzer, WB2RJB

DXing, "The big pileup" is an easy game to shy away from. This facet of Ham Radio is enjoyed by many but few master the art at an early age of radio operation. The "Well Seasoned Ham" in DXing knows the techniques, the tricks which result in outstanding contacts while others are still pounding away to work that elusive country.

To whet our interest in and extend our knowledge of DXing our February program will consist of a forum headed by Bob Roberts, WA2QAU, assisted by Al Keltz, W2TXB; Gene Fuller, W2LU; Rick Berg, WA2RLQ; and Corney Unruh, WA2EOQ. The program will open with an introduction by Bob and a question-answer session will follow. Questions will be routed to the appropriate members of the panel according to content of question and expertise of the panel members to deal with each question.

GEARS, the "Gleason Employees Amateur Radio Society" have invited us to join them for this meeting at their meeting location, 1000 University Avenue. Welcoming us will be Bill Buchannan, WA2ELC, Chairman and Bill Gross, KA2LFS, Vice-Chairman of GEARS.

As usual meeting time is promptly at 8:00 p.m. but again note the different meeting location which is the Gleason Recreation Center, 1000 University Avenue. Date: Friday, February 1st.

FCC Exams at RaRa Hamfest

In spite of the recent ARRL Bulletins announcing the demise of F.C.C. trips to hamfests, the F.C.C. will hold exams at the 1980 RaRa Hamfest.

We were fortunate to have received our commitment for Amateur license exams prior to the recent F.C.C. moratorium on such activities. The

DINNER-DANCE 1980

Mark your calendar now so you can attend the Annual Valentine Dinner-Dance. This years affair is shaping up to be a memorable event.

The Date: February 9, 1980

The Time: 7:30 p.m.

The Place: Hospitality House
2226 Penfield Road
Williamsburg Room

The entree's this year are Chicken Breast, stuffed with Canadian bacon and cheese, or, Sirloin of Beef. Please specify your choice when purchasing your tickets.

While this traditionally been the evening where the yl's have been given special thanks for the consideration which they have shown us, the same enjoyable evening with friends is open to you all, stag or drag, and we encourage and hope that you will attend.

Contact Len Gessin, WA2ZNC, at 248-2511 or Alan Komenski, AC2K, at 248-2497 for tickets.

same general schedule as used in past years will be followed, and as in past years, appointments are a must to assure your seat at the exams.

With the retirement of Joe Welch, responsibility for the 1980 Hamfest examinations has been shifted to the Buffalo F.C.C. office. Your application for appointment should be sent to the F.C.C., 1307 Federal Building, 111 West Huron Street, Buffalo, NY 14204. Your completed form 610 must reach the Buffalo F.C.C. office by May 1, 1980. Be sure to answer question 19 of this form with "Rochester Hamfest". But **DO NOT** mail your 610 to Gettysburg or Philadelphia. *Mail your 610 to BUFFALO.*

Get your 610 form in early and good luck to all. See you at the 1980 RaRa Hamfest!

73, John Schooley, K2NC

VE TEAM

The next **ALWAYS FREE** testing session:
 Saturday February 15th (Third Saturday)
 Rochester Institute of Technology
 Kate Gleason College of Engineering
 Gleason School of Engineering
 Room 3139, Bldg. 9
 Use "J" parking lot

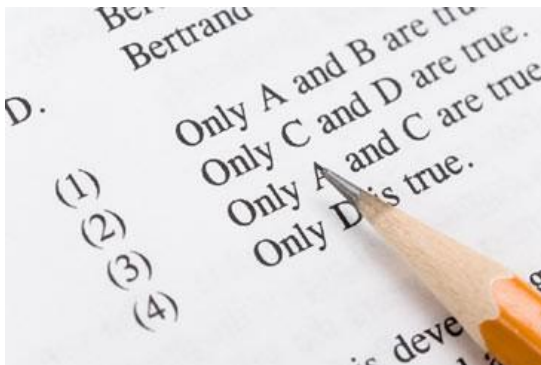
Registration at 9:45AM
 Testing at 10:00AM

You do not have to preregister.

To avoid giving your SSN go to:
<http://wireless.fcc.gov/uls/index.htm?job=home>
 Register and bring the resultant FRN to the exam.

For more info and a map:
https://rochesterham.org/license_testing.htm

Don Kiser - AC2EV
 RARA Board member
 VE Team Leader
 585-613-1035



CW ELMERS

Name	Call	Area	Email
Ned Asam	W2NED	Pittsford	w2ned@frontiernet.net
Tim Brown	WB2PAY	Ogden	tjbrown@rochester.rr.com
Pete Fournia	W2SKY	Penfield	pfournia@gmail.com
Bill Hopkins	AA2YV	Brighton	whopkin4@naz.edu
Bob Karz	K2OID	Webster	rkarz@rochester.rr.com
Joe Rowe	AG2Y	Webster	ag2y@rochester.rr.com

Jacques Paquin	KC2LVO	G	David Mitchell	KD2RAF	G
Jennifer Herting	KD2BEC	E	Paul Mezzanini	KD2TEQ	T
Walter France III	KD2TER	T	Dale Oswald	KD2RUQ	G
Maxwell Bennett	KD2THU	T	Michael Frachel	KO4BCN	T
William Waghorn III	KD2THW	T	Mark Goewey	KD2THV	T

New licensees names are in BOLD

RADIO ELMERS

Name	Call	Area	Email
Tim Brown	WB2PAY	Ogden	tjbrown@rochester.rr.com
Dave Carlson	N2OA	Batavia	kdcarlso@gmail.com
Lawrence Hill	N2AJX	Henrietta	lawrence.hill@rit.edu
Bill Kasperkoski	WB2SXY	Pittsford	wb2sxy@arrl.net
Don Kiser	AC2EV	N Greece	dkiser100@gmail.com
Karl Heinz Kremer	K5KHK	Chili	k5khk@khk.net
Tim Magee	WB2KAO	Greece	585-704-5747
Peter Schuch	WB2UAQ	Perinton	pschuch@rochester.rr.com
Forest Shick	WA2MZG	Webster	fshick3@gmail.com
Dave Timmons	W2DST	N Greece	dstimmons@gmail.com
Dan Waterstraat	W2DEW	Henrietta	higreen@rochester.rr.com

RaRa CALENDAR

TIM BARRETT, K9VB, MEMBERSHIP SECRETARY

February 2020

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1 AWA Museum Open 1pm - 5pm VT, BC, MN QSO Parties 10-10 Int Winter Contest SSB Black Sea Cup International F9AA Cup CW Mexico RTTY Contest FISTS Slow Speed Sprint AGCW Straight Key Party
2 VT, BC QSO Parties 10-10 Int Winter Contest SSB Black Sea Cup International F9AA Cup CW Mexico RTTY Contest North American CW Sprint	3 AWA Net 145.110 MHz, 7pm RSGB 80M Club Champ, SSB ARS Spartan Sprint	4 AWA Museum Open 10am-3pm RXCWG CW Practice Net 9pm QRP Fox Hunt Phone Fray CWops Mini-CWT Test	5 RaRa Monthly Mtg 7:00pm, BSA HQ, Brighton Henrietta TLR ROC City Net 8:00pm 1.924 MHz UKEICC 80m Contest	6 RaRa BoD Meeting 5:45pm Nova-works 333 Metro Park Rochester 14623 ARES Net 146.61 MHz 7pm NRAU 10m Activity Contest NCCC Sprint QRP Fox Hunt SKCC Sprint Europe	7 RDXA Happy Hour, Macgregor's Bar, 1129 Empire Blvd	8 AWA Museum Open 1pm - 5pm CQ WW RTTY WPX Contest SARL Field Day Asia-Pacific Sprint, CW Dutch PACC Contest SKCC, FISTS Sprints KCJ Topband Contest YLRL RL-OM Contest OMISS QSO Party RSGB Topband Contest
9 CQ WW RTTY WPX Contest SARL Field Day Dutch PACC Contest SKCC Sprintathon KCJ Topband Contest YLRL RL-OM Contest OMISS QSO Party Balkan HF Contest	10 AWA Net 145.110 MHz, 7pm ARRL School Club Roundup	11 AWA Museum Open 10am-3pm ARRL School Club Roundup RXCWG CW Practice Net 9pm QRP Fox Hunt Phone Fray CWops Mini-CWT Test	12 ROC City Net 8:00pm 1.924 MHz ARRL School Club Roundup SIARC Monthly Mtg, 7.30pm RSGB 80M Club Champ, Data	13 ARES Net 146.61 MHz 7pm ARRL School Club Roundup NCCC Sprint QRP Fox Hunt	14 RDXA Happy Hour, Macgregor's Bar, 1129 Empire ARRL School Club Roundup PODXS 070 Club Valentine Sprint	15 AWA Museum Open 1pm - 5pm RARA Winterfest Stewart Lodge, Mendon Ponds Park ARRL Int DX Contest, CW Russian PSK WW Contest Feld Hell Sprint AWA AM QSO Party
16 ARRL Int DX Contest, CW SARL Youth Day Sprint Russian PSK WW Contest AWA AM QSO Party Run for the Bacon QRP Contest	17 AWA Net 145.110 MHz, 7pm	18 AWA Museum Open 10am-3pm RDXA 7.30pm Monroe Cty EOC RXCWG CW Practice Net 9pm QRP Fox Hunt Phone Fray CWops Mini-CWT Test	19 ROC City Net 8:00pm 1.924 MHz AGCW Semi-Auto Key Evening	20 ARES Net 146.61 MHz 7pm NCCC RTTY Sprint QRP Fox Hunt	21 RDXA Happy Hour, Macgregor's Bar, 1129 Empire CQ 160M Contest, SSB	22 AWA Museum Open 1pm - 5pm RaRa Academy - Arduino CQ 160M Contest, SSB REF Contest, SSB UK/EI DX Contest, CW
23 CQ 160M Contest, SSB REF Contest, SSB UK/EI DX Contest, CW High Speed CW Contest SARL Digital Contest	24 AWA Net 145.110 MHz, 7pm QCX Challenge	25 AWA Museum Open 10am-3pm RXCWG CW Practice Net 9pm QRP Fox Hunt Phone Fray CWops Mini-CWT Test QCX Challenge SKCC Sprint	26 ROC City Net 8:00pm 1.924 MHz UKEICC 80M Contest	27 ARES Net 146.61 MHz 7pm NCCC RTTY Sprint QRP Fox Hunt RSGB 80M Club Champ, CW	28 RDXA Happy Hour, Macgregor's Bar, 1129 Empire	29 AWA Museum Open 1pm - 5pm UBA DX Contest, CW SC, NC QSO Parties NA Collegiate Champ, RTTY NA QSO Party, RTTY Feld Hell Sprint Russian WW Multimode Contest

NEWS FROM AREA CLUBS

MONROE COUNTY ARES / RACES NEWS

Monroe County Amateur Radio Emergency Service (ARES)® is an amateur radio public service organization based in Monroe County, New York, and is open to all licensed amateur radio operators. Monroe County Radio Amateur Civil Emergency Service (RACES) is a program of the Monroe County Office of Emergency Management. We participate in training and emergency exercises so that we can serve other agencies during times of communication failure.



The Monroe County Amateur Radio Emergency Service, Inc. holds its meetings on the fourth Thursday of each month except in July, August, November and December. Anyone interested, members and non-members, are welcome to attend.

On even numbered months the meetings are held at the Monroe County EOC, 1190 Scottsville Rd. (Media Room, 2nd floor, north end). On odd numbered months we meet at the Red Cross, 825 John St.. W Henrietta. at 6:00 PM. Please check our website for any schedule changes.

If the doors are locked, call WB2EOC on the 146.61 MHz (-) 110.9 Hz PL repeater.

Monroe County ARES/RACES meets on the air every Thursday of the month at 7:00 PM, on the N2MPE 146.61 MHz (-) 110.9 Hz PL and 444.45 (+) 110.9 Hz PL repeaters. Our club callsign is WB2EOC.

There is no net on nights when we hold our regular meeting, generally on the 4th Thursday of the month.

WEB: www.monroecountymcomm.org

Facebook : Monroe County Amateur Radio Emergency Service, Inc.

Twitter @MCARESny

Severe Weather Alerts: Winter may bring severe weather in the form of heavy snow storms, strong winds, and flooding. If you experience severe weather, especially when accompanied by damage to property in your area, listen to your local ARES/RACES repeaters for information. While official ARES/RACES activation could be a possibility, it is more important that we open a spontaneous net simply to share information about weather conditions in your immediate area. Don't wait for someone else to do it. Pick up the microphone and start a net. Have each check-in station give you a situational awareness report and emergency power report. If you don't have a copy of the directed net protocol, you can find one at the WEB address listed above. (Activities/ARES Net/ Net Script/

Downloads). We encourage all amateur radio operators to take a free Skywarn TM class offered by the National Weather Service. The schedule of classes can be found at <https://www.weather.gov/buf/skywarn>

Monroe County ARES
Ralph Dutcher, Net Control - KD2BDZ@arrl.net

ROCHESTER DX ASSOCIATION, RDXA

RDXA meets the 3rd Tuesday of every month (September through June) except for December, which is the Annual Holiday Banquet. Meetings are open to everyone and all are encouraged to attend.



February program is Contesting with the ANAN SDR Radio by Mark, N2YB.

Meetings are held at the Monroe County EOC 1190 Scottsville Rd. (second floor), Rochester, NY 14624 at 7:30PM.

ROCHESTER RADIO REPEATER ASSOCIATION

The Rochester Radio Repeater Association, RRRA invites you to attend its February 21st, 2020 meeting. Meetings are held on the 3rd Friday of the month in the Pittsford Town Hall Basement starting at 7:30 PM.

Tonight's meeting will be a discussion about ideas and suggestions for future meeting presentations. Keeping in mind what's been seen in the past. We need fresh ideas. Help make our meetings exciting.

There are a lot of subjects we don't know you are interested in, tell us!

The RRRA officers are Bob Shewell, N2HJD President, Bob ODeil, N2BZX Vice President, ED Wilkonski, KC2WM Secretary, and Bob Smith, NS2B-Treasurer / Membership Chairman. RRRA also accepts donations to the club. If you are not currently a member and want to support RRRA, you can join at our monthly meeting or on our web site www.k2rra.org

ROCHESTER VHF GROUP

The January VHF Contest has ended. You braved the elements. You lost your voice. You battled for contacts like a true warrior. Don't keep it to yourself! Post your results (especially if you don't plan to send your log to the ARRL) on <http://www.3830scores.com> and stand alongside other participants, big and small.

Looking forward, the club will have a members' breakfast on February 8 (see <http://RVHFG.org> for more details).

April will see the return of a Spring Auction! We're planning on a "silent auction" format for now. Expect equipment of all sorts (not just VHF). There may even be a series of mini-labs and workshops to keep you busy as the auction proceeds!

Plans are still coming together so look for details in the next RARA Rag and on www.rvhfg.org

XRX AMATEUR RADIO CLUB

The XRX Amateur Radio Club meets the 2nd Thursday of each month. The meetings are 6PM at the Webster Recreation Center. Look for details on our website <http://xarc.us>

DRUMLINS AMATEUR RADIO CLUB

The Drumlins Amateur Radio Club meets every third Wednesday of the month at 7:30 PM at the Wayne County EMO/Sheriff's Office 7376 State Hwy 31 #1000, Lyons, NY 14489. Doors open at 7 pm, meeting starts at 7:30 pm. Announcements will be made on the 146.685 repeater. The Drumlins ARC website address is <http://drumlinsarc.us/>



AMATEUR RADIO ASSOCIATION OF THE SOUTHERN TIER, ARAST

ARAST meets the third Thursday of every month at the Town and Country Fire Department on Gardner Rd in Horseheads New York. Chemung County ARES (CCARES) meets the first Tuesday of the month except February at Harris Hill. See www.ccares.info for details. CCARES covers the entire area in Chemung, Schuyler and Steuben counties and all are welcome.

Communicators are needed to help out with the 2019 Wineglass Marathon October 6, 2019 (one week following the Hamfest). If you would like to help out, contact the emergency coordinator: emergencycoordinator@stny.rr.com

Our website is still under construction. It is anticipated that construction will continue well into the year. Until that is finished check us out at www.arast.info.

Don't forget to check out our repeaters when you visit the area. The N3AQ 147.36(+) and the 146.70(-) are the principal 2 meter repeaters. Also Echolink is available using the call sign KA2BED-R. Check it out. A full list of available repeaters that can be heard in the twin tiers area surrounding Chemung County can be found at www.arast.info/arast_website/public/repeaters.php.

COMMUNITY AMATEUR RADIO CLUB, CARC

If you are interested in being a part of this forward thinking and active club, visit us at a meeting or join us on one of our weekly nets. We meet at the Hoag Library (134 S. Main St. Albion, NY) on the first Saturday of each month at 7PM. Each meeting has a brief training/refresher period with upcoming topics including: net protocol, repeater set-up/maintenance, and digital signaling. The club holds a net every Sunday evening at 8pm (winter) and 9PM (summer) - 0100 UTC Monday - on 147.585 simplex, and we host the Thursday Night Social Net, Thursday at 8:30PM on 147.285+. We'd love to hear you check-in!

DIGITAL COMMUNICATIONS ASSOCIATION OF PERINTON, DCAP

DCAP members continue to experiment with leading edge digital communication modes. We were formed in 1994 to foster the development of local and regional packet radio networks using AX25 and TCP/IP. Today we have members using the club sponsored DSTAR repeater (KB2VZS on 444.8MHz), several personal and publicly accessible DSTAR hotspots, Yaesu System Fusion systems on non-club repeaters and DMR systems through repeaters and personal hotspots. DCAP members meet for breakfast at 7AM nearly every Saturday morning at Rikki's Family Restaurant in the village of Fairport and everyone is welcome to join us. Talk in is on the KB2VZS analog repeater on 146.715MHz with a PL tone of 110.9Hz.

KEUKA LAKE AMATEUR RADIO ASSOCIATION, KLARA

The purpose of our association is to:

- promote interest in Amateur Radio communication and advancement of the radio art.
- conduct programs, training, and exercises that enhance the skills of the members, and educate the community.
- develop ties with other services and establish relationships with community organizations.
- provide emergency communication services.
- promote enjoyable Amateur Radio related events.

The association was incorporated in 1991 and has been a vibrant part of the community ever since. We have a very active VE testing program. We also participate in numerous public events (the Wineglass Marathon and the Wine Country Classic Boat Regatta are two of the largest).

We operate a system of three repeaters (which are linked), providing a large area footprint for two meter FM amateur use. Please see our website for details. (klara.us)

Our meetings are held on the second Wednesday of each month at the Civil Defense and Fire Training Center on Route 54 in Bath, NY.

SQUAW ISLAND AMATEUR RADIO CLUB, SIARC

The Squaw Island Amateur Radio Club (SIARC) meets every second Wednesday of the month at 7:30PM at the Ontario County Safety Training Facility, 2914 County Road 48, Town of Hopewell.

We have License Exam Testing every other month which begins at 6:30PM.

The next meeting will be Wednesday, February 12th. There will NOT be license testing. 73's Steve Benton VP SIARC WB2VMR

INTERLOCK ROCHESTER - K2HAX - ROCHESTER'S HACKERSPACE

Visit our website at <http://www.interlockroc.org/>,
contact us at info@interlockroc.org,
or find us in #interlock on Freenode IRC.

ROCHESTER MAKERSPACE

For more information visit <https://www.makerspacerochester.org/hamradio>

GENESEE VALLEY AMATEUR RADIO ASSOCIATION

Email n3dsp@lafireline.net for details.

ASTRONOMY SECTION ROCHESTER ACADEMY OF SCIENCE

For more information visit <http://www.rocheasterastronomy.org/>

THE AMATEUR'S CODE

Originally written by Paul M. Segal, W9EEA (1928)

THE RADIO AMATEUR IS:

CONSIDERATE	Never knowingly operating in such a way as to lessen the pleasure of others.
LOYAL	Offering loyalty, encouragement and support to other amateurs, local club, and the American Radio Relay League, through which Amateur Radio in the United States is represented nationally and internationally.
PROGRESSIVE	With knowledge abreast of science, a well built and efficient station and operation beyond reproach.
FRIENDLY	With slow and patient operation when requested, friendly advice and counsel to the beginner, kindly assistance, co-operation and consideration for the interests of others. These are the hallmarks of the amateur spirit.
BALANCED	Radio is an avocation, never interfering with duties owed to family, job, school or community.
PATRIOTIC	With station and skill always ready for service to country and community.

RArA MARKETPLACE

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RARA OFFICERS, DIRECTORS AND COORDINATORS

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XRX Amateur Radio Club

Brian Donovan, K2AS: k2as@outlook.com

MARCH RAG DEADLINE FEBRUARY 15, 2020 RARA meets at 7PM on the first



Wednesday of each month. Join us at:

Seneca Waterways Council, BSA Headquarters
2320 Brighton Henrietta Town Line Rd
Rochester, New York 14623

GET DIRECTIONS

Rochester Area Repeater Listing

THE RARA RAG

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